

Knowledge beyond time ...

Samvit



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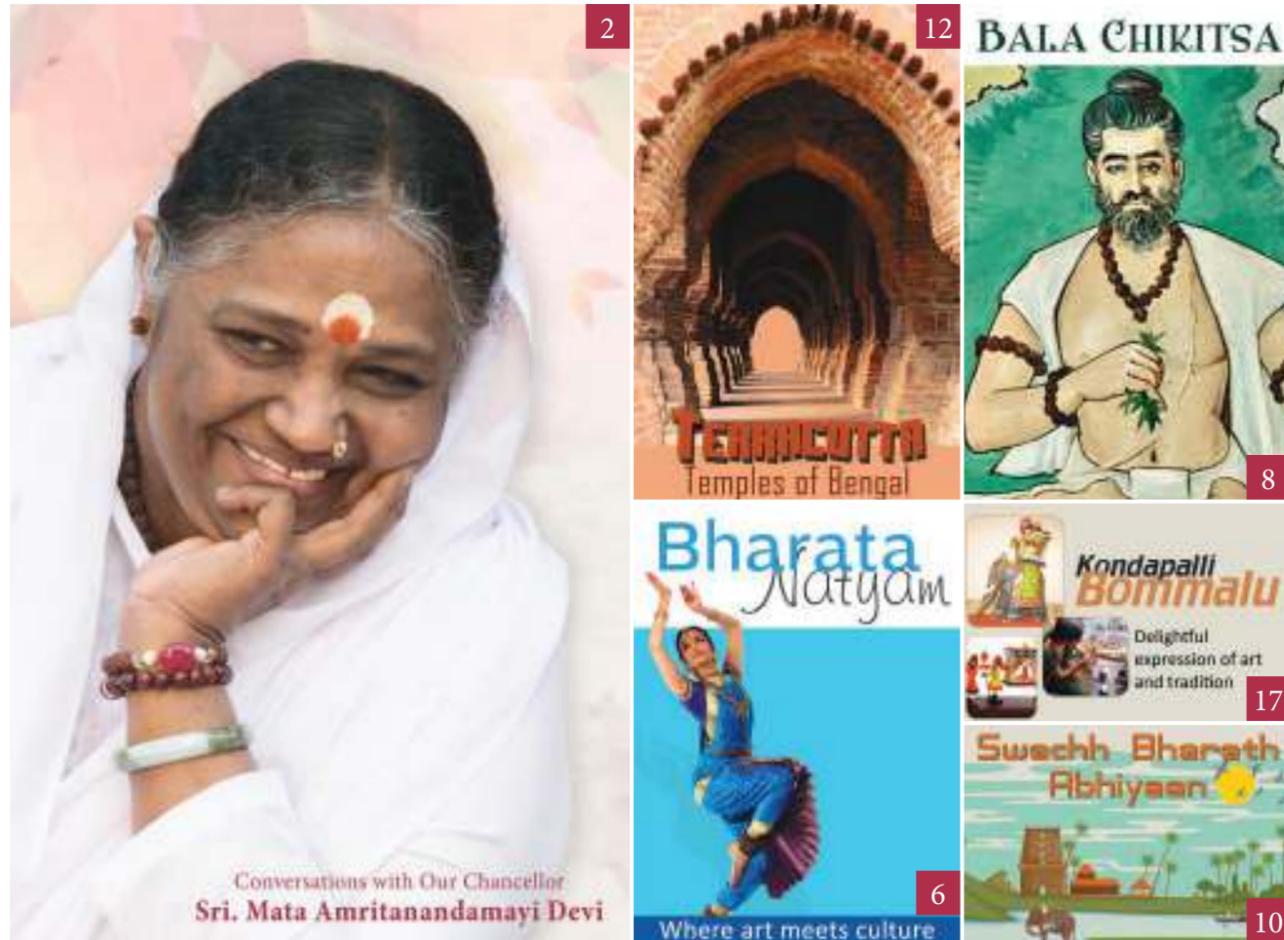
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UNIVERSITY

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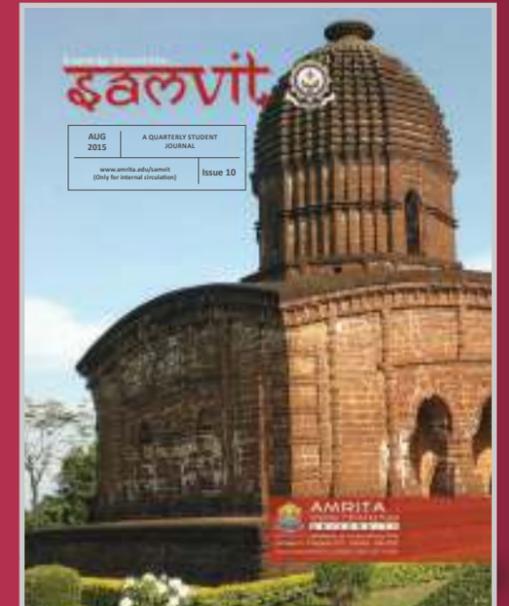
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EDITORIAL

Samvit this time lights up the different faces of the socio-cultural life in India. "A nation without a cultural heritage is like an orphan who has nothing to feed upon" said Emerson once. If we go upon this idea, then India would be a child born with a silver spoon in its mouth and a huge family to support her.

The insight into Bharatanatyam and Kondapalli Bommalu shows that artistic talent is deep-rooted in the culture from our past. Our creativity to mirror life through art forms has always been a subject for inspiration. The article on Terracotta Temples of Bishnupur proves that these imposing structures are indeed a sight to behold and is a proof of the splendour and aura of the Malla rulers. From zero to infinity India's contribution in mathematics is magical and you can find one such magic in the article "Magic Square". Then we have Nahusha's story with an influential moral that humility is the most important quality to imbibe.

Even though we have deep roots in our culture and heritage, it is important to nurture them with proper nourishment. When we cross on to present day India, we find alarming issues like the neglected souls of the poor farmers who are withering day by day, and also the poor quality of the current education. But the articles like "Project Mausam" and "Swachha Bharath" show that there is indeed a silver lining behind the clouds, and that, we can soon feel the bliss of beaming rays. Let this edition illuminate and inspire you to be that positive change towards a better India.



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Conversations with Our Chancellor Sri. Mata Amritanandamayi Devi

Question: Amma, According to you what is the greatest contribution of our ancient civilizations?

Amma-One of ancient Bharat's valuable contributions to the world was the invention of number zero, but now our country needs to add a few things to that zero: zero-poverty, zero-illiteracy, zero-waste, zero-crime, zero-violence against women, etc. If we can make strides in these areas, India can become a role model for many other countries.

Question: How should the people see Amma? As God, Guru or Mother?

Amma- As you like. I am only interested in serving you..

Question: Amma, what is the true meaning of the statement 'nobody is your own'?

Amma: When we say "no one is my own," then "everyone is my own, everyone is an extension of my True Self" is also implied. If we place 100 pots of water out in the sun, we will see a reflection of the sun in each and every pot. But, in reality, there are not 100 suns; there is only one sun. Similarly, it is the one and same consciousness that is manifesting in all beings.

Question: I have a question about negative thoughts and emotions. I find myself wondering what the right attitude is and how to prevent negative thoughts and emotions from affecting my life and affecting others.

Amma: Amma: When you go into a supermarket, you see so many things—some you want and some you don't. Regardless, you don't hunt down the manager and interrogate him as to why he stocks things you're not interested in buying. You just focus on what you came to buy. Similarly, when the

various thoughts come, you need to be alert and aware and use your discrimination to decide which are helpful with respect to attaining your goal and which are not.

This effort, inquiry and discrimination must come from within. We must ask ourselves what is helpful and what is not. We cannot always ask the guru. If an egg is opened from the outside, it will be destroyed, but when it opens from within, new life is created.

Question: It is said there is only one dharma [duty]—to realize the Self. But I seem to have so many dharmas—family dharma, office dharma, social dharma... Is there really only one dharma?

Amma: For a spiritual person, the goal of life is to know the Self. Otherwise, what is the difference between a human being and a worm? A worm also



"We should never forget that after every night, there is a dawn. We should never lose our optimistic faith."

-amma

eats, sleeps and procreates—doesn't it? If the left hand is cut, the right hand soothes it, applies medicine and wraps it with a bandage. There is no sense of "other" there. A spiritual person moves like this in the world, seeing other's pain and joy as their own. Similarly, a spiritual person understands that there is but one Self reflecting in each and every being.

Question: Amma, your presence has brought fragrance to our lives. I would like to know: How do we bring your fragrance to the West, where the children are suffering so much due to drugs and violence? If Amma would say what it is to be done, we will take up the work with full sincerity to help bring up not only this state but the whole country.

Amma: You can make a difference if you really want to. It is human nature to imitate the people we look up to. This is why we see so many people imitating the fashion and looks of certain athletes and movie stars. Understanding this, everyone should try to become a good role model because, no matter who we are, there is definitely someone, somewhere, watching and imitating us. First and foremost, we must set a good example in our homes for our own children because people pick up almost all of their good and bad qualities from their home. So, parents must lay a strong foundation of values for their children by living those values themselves.

One thing you can do to help the youth is to form small groups and visit houses. Maybe you can visit 10 houses a day and counsel the children there. Talk to them, advise them, give them some spiritual teachings. Help them to recognise their weaknesses and to understand the potential consequences of their destructive behaviour. In this way, you can help the children cultivate awareness. A diabetic may take medicine, but if they keep eating sweets, their sugar level will still remain high. This shows us that dietary awareness is just as important as taking medicine, if not more so. So, we need to help children cultivate awareness of the potential consequences of destructive habits. They need the basic knowledge, but they also need awareness and good judgment

NAHUSHA... The Fallen God

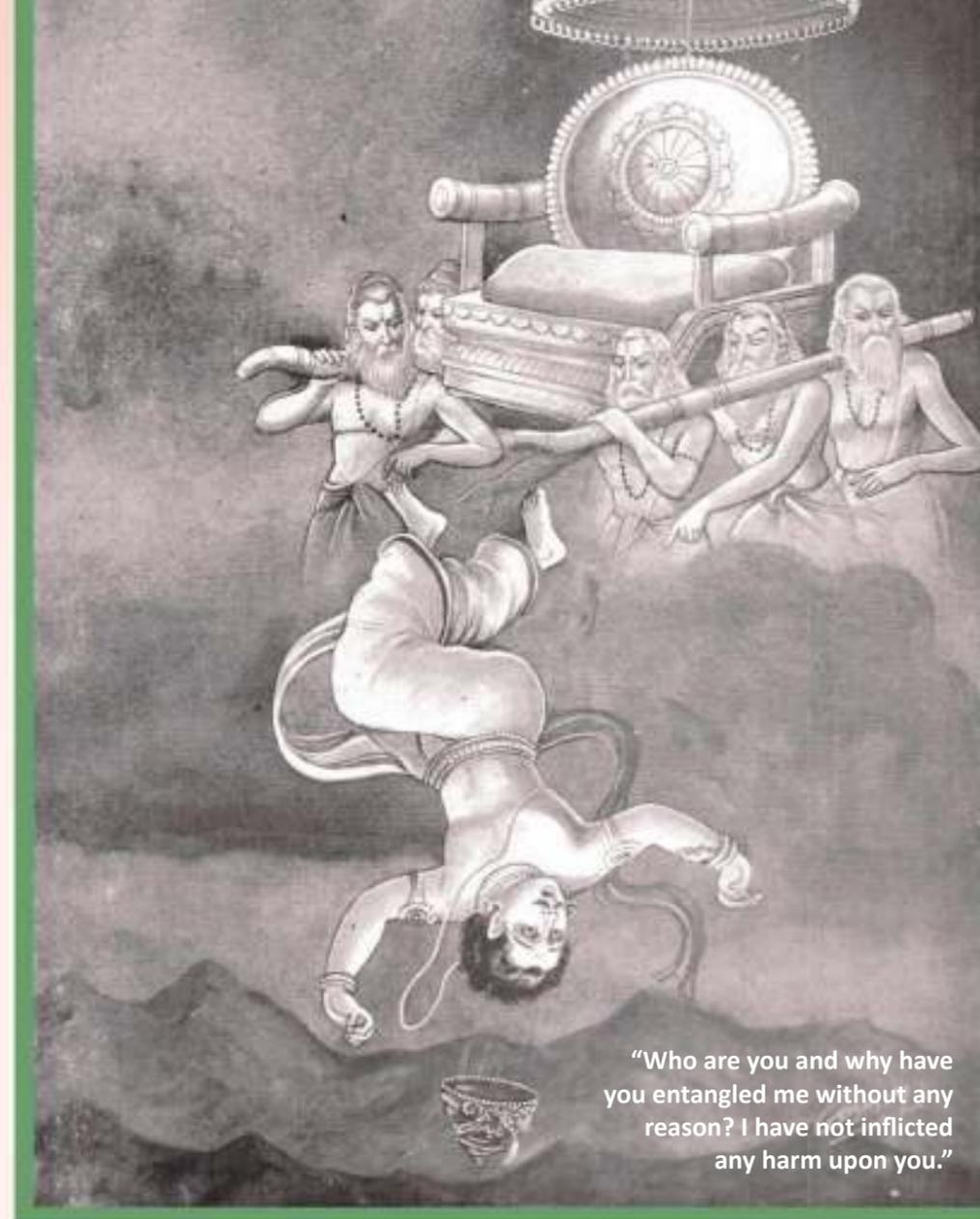
This was at the time when the Pandavas were in exile. One day, Bhima went on a quest to find food to feed them all. While traversing through the forest, he came upon a cave and decided to go inside. Upon his entry, he was appalled to see a giant python sitting near the entrance. Immediately, the python pounced on Bhima and coiled itself around Bhima's body. Bhima, presumably invincible, struggled to free himself from the clutches of the python but his efforts were fruitless. Finally, he became tired and gave up the struggle.

Bhima asked the python, "Who are you and why have you entangled me without any reason? I have not inflicted any harm upon you." To which the python answered, "I am your ancestor, in a previous birth I had insulted a sage and I was cursed to be a python. Now, I will eat you unless you answer my questions correctly."

Meanwhile, the Pandavas were worry stricken; Bhima had not yet returned and it was getting dark. Since Bhima was so mighty and powerful, they could not imagine any harm coming to him, still they were feeling anxious and decided to go in search of him. In their path, they saw many dead animals which only increased their anxiety. Finally, they came upon the mouth of the cave and saw their dear Bhima caught in the tight grip of Nahusha, the python.

The eldest Pandava, Yudhishtira pleaded to Nahusha to free his beloved brother. Recognizing that Nahusha was an inmate of the abode of Indra, he prostrated immediately and listened to Nahusha's story of becoming a python and the clause that only Yudhishtira could free him from the curse. Nahusha exclaimed, "My only chance of freedom is now. Your brother's life is in my hands. If you answer all my questions correctly, Bhima will be saved as will I."

It was a strange situation, but Yudhishtira was willing to undergo anything so as to see Bhima's life spared. Therefore he agreed, taking Lord Indra, his father's name and Nahusha began to pose several questions based on ethics:



codes of living. Yudhishtira answered each question precisely, but also with great humility. Nahusha was pleased and freed Bhima. Now, it was Yudhishtira's turn to ask the wise Nahusha many questions — which were satisfactorily answered.

A chariot appeared in the sky and landed right before their eyes. King Nahusha cast off his serpent skin and assumed his majestic form and ascended up to the heavens. Reunited, the Pandavas rejoiced.

The lesson to be learned from this story is that humility is the most important quality to be imbibed. Amma says, "In a cyclone, large trees and buildings are uprooted, but no matter how strong the cyclone is, it cannot harm the grass." Similarly, if we embody humility and destroy our ego, even the greatest of perils will not faze us.

Swadha Vaidehi Dwivedi
S3 Bsc Biotechnology

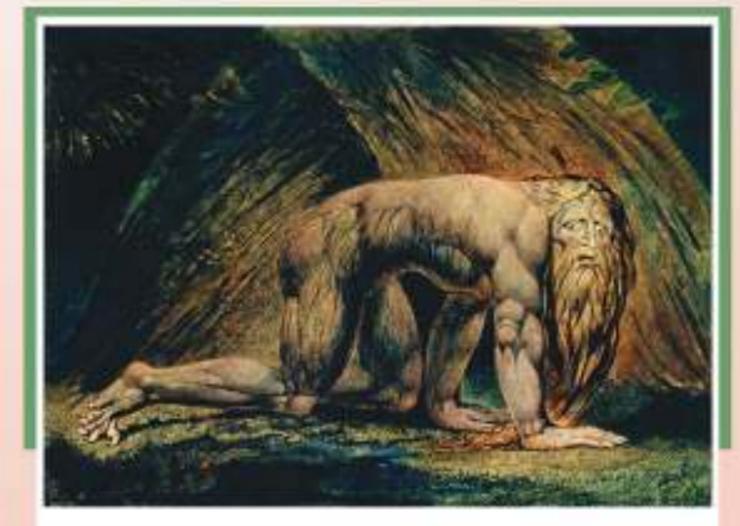
Q: What is the definition of a Brahmin?

Brahmin is one who has the qualities of truthfulness, generosity, sympathy, a dislike for cruelty, and a capacity to do tapas. This is a Brahmin and no one else.

Q: What is supreme knowledge?

Brahman; in that, there is no misery or happiness: both look alike to one who knows. Hence, one who has attained supreme knowledge will never be unhappy.

This continued as several other questions pertaining to the order of society, Varnashrama division into four castes, and other important points on behaviour and





Practised by both male and female dancers all over the world, Bharata Natyam is one of the most popular and widely performed classical dances form in India. Originating in the temples of Tamil Nadu, the art form is known for its grace, fine lines and perfect poses.

Bharata Natyam

The name Bharata Natyam is of relatively recent origin, when performers like Rukmini Devi Arundale (founder of Kalakshetra Chennai), revived the dance in the 20th century. The original names of Bharata Natyam were Sadir, Chinnamelam and Dasi Attom. A possible origin of the name is from Bharata Muni, who wrote the Natya Sastra (The science of Dance). The word Bharata Natyam combines; Bha - bhavam, Ra - ragam, Ta - talam and Natyam to form BhaRaTaNatyam.

Origin of Bharata Natyam

The Gods and Goddesses pleaded with Lord Brahma to create another Veda which would be simple for the common man to understand and enjoy. Taking essence from the other four Vedas - words from Rig-Veda, abinaya from Yajur- Veda, Music from Sama- Veda and Rasa from Atharva -Veda, Brahma created the Panchama Veda, the fifth Veda, the Natya Veda! After

creating it, Brahma handed it to Sage Bharata to write and then spread the writings in the material world. In the festival called Indradwajamaha, celebrated in Indra's palace, Bharata was asked to showcase his works. Bharata found it difficult to present it without female dancers. So as demanded by Bharata, Brahma created 13 Apsaras, the celestial maids. So the team of Bharata, comprising Gandarvas and Apsaras, Sage Narada leading the orchestra, Indra organising the event, performing before Devas and Siva Parvathy, the first Dance drama performed was 'Amrita Madana'.

Lord Shiva and Parvathy who were witnessing it were immensely impressed. Shiva made few corrections in the performance and categorised it in to Tandavam and Lasyam and taught Parvathy Lasyam. Parvathy then taught the dance to her chosen discipline Usha, daughter of Banasura and sent Usha to earth to propagate the dance. Usha came down to earth, to the city of Dwaraka and taught the art to the Gopikas. Thus the divine art form was presented to the people of earth by Usha and by 100 sons of Sage Bharata

Bharata was an ancient theatrologist and musicologist, who we call as the father of Indian theatrical art forms. Traditionally attributed to Sage Bharata, Natya Sastra is an antient Indian treatise on the performing arts, encompassing theatre, dance and music. Dated between 5th century BC and 3rd century BC, Natya Sastra comprises 36 chapters. It covers stage designs, music, dance, make up and virtually every aspect of stage craft.

According to Natya Sastra, the main aim of dance is to evoke Rasa, sentiments among the audience. Rasa is what mind feels and expression of feelings thereafter. Natya Sastra says that the dancer has an enormous resource bank to communicate a story, an idea, an emotion. He /she uses limbs, hands, face, eyes etc. to express ideas.

Dance is a language to communicate an idea or a theme. Like a writer conveys an idea through his writings, a painter through his paintings, an artisan through his sculptures, a dancer does so through abinaya (acting) with the help of gestures, body movements and poses.

Bharata Natyam has immense scope that, a well trained dancer can even enact and showcase stories from ancient scriptures to current issues in the society and even themes and theorems in science and maths.

Smt. Uma Govind (Well renowned dancer)

“Natya brings right to people going wrong, enjoyment to those who seek pleasure , discipline to ill behaved, tolerance to the well behaved.

It brings courage into cowards, retells the exploits of the brave, grants knowledge to the ignorant and Wisdom to the wise.

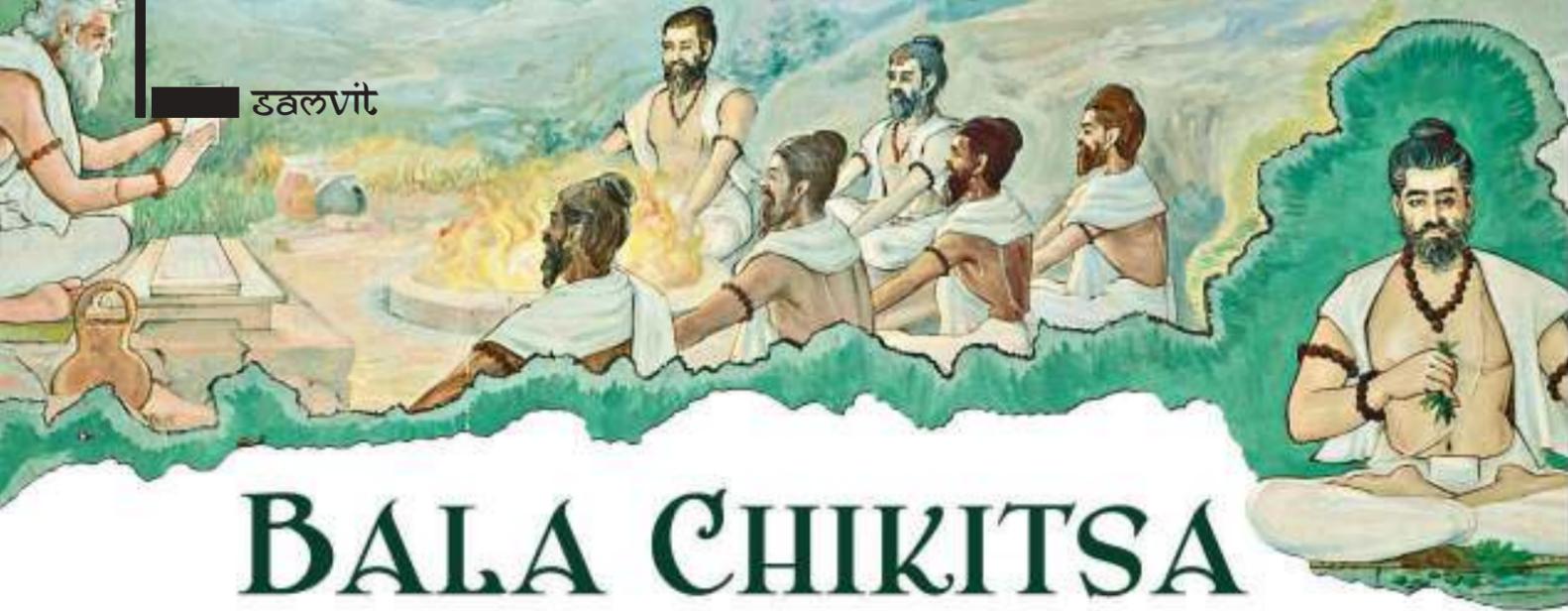
It grants fortitude to the grief stricken, enjoyment to the rich, earning for all those who would make a living, sets stability into disturbed minds.

It gives you peace, entertainment and happiness as well as the beneficial advice based on the actions of the high, the lowly and the middle class people. It brings rest and peace to persons afflicted by sorrow, fatigue, grief or helplessness

Therefore I say, there is no art, no knowledge, no yoga, no action that is not found in Natya. “

-Words of Brahma when he created Natya Veda





BALA CHIKITSA

Bala Chikitsa/ Kaumarabhritya is Ayurvedic Pediatrics, a branch of Ayurveda that deals with the healthcare and remedies of children., it deals with more than just the diagnosis and treatment of diseases related to children but extends to the well being of a child right from the time of its conception- and even before.

Kashyapa Samhita is basically the book of pediatric specialty dated to a period of 6th century BC. The Vagbhata's, Ashtanga Samgraha and Ashtanga Hridaya are the Samhita (texts) followed by Vaidyas of Kerala.

The childhood is divided into three stages i.e. Garbha (intra-uterine life), Bala (childhood) and Kumara (adolescence) which are accepted even by Modern scholars.

Garbha Vyapada (Complications in the intra-uterine stage)

Vagbhata mentions various monthly medications and food regimens for the conceived mother to avoid the complications of pregnancy like the intra uterine growth retardation (lina garbha) and various medicated ghee are recommended in the eighth month for attaining easy delivery.

Concept of Neonatal Care (Navjata Shishu Paricharya)

Ayurveda describes in detail the care of a baby after birth including Ulva Parimarjana (cleaning of the vernix caseosa) Pranapratyagaman(resuscitative measures), Nabinaal chhedaan (cutting of umbilical cord) Snana (bathing), pichu dharan (external oleation), swarnaprashan (ingestion of gold bhasma

with medhya herbs), garbhodaka vamaana (cleaning of stomach by emesis) and jata kara (initiation of feeding of newborn). Just after birth, vernix of baby should be removed by using saindhava (rock salt) and ghee. This dries the baby, gives sufficient tactile stimulus for breathing and prevents hypothermia.

Use of bala taila(Medicated oils) is also advocated. Chanting the holy mantras is also prescribed which stimulates auditory nerve. When the baby attains a proper breathing and cry, his umbilical cord should be cut at a distance of four angula (Four fingers) from umbilicus, tied with a thread, suspended by neck and 'Kustha taila(medicated oil) applied to it to prevent sepsis..

For bathing of baby, decoction of herbs should be used. These have antiseptic properties. The stomach of baby should be cleared by making him vomit with help of saindhav (salt), ghee and vacha (Acorus calamus). This clears the ingested amniotic fluid and blood and prevents vomiting after feed. After stomach wash, feeding is initiated by ghee and honey. This gives energy and triggers passive immunity.

On second and third day, lakshmana treated ghee is advised and exclusive breast feeding is to be started thereafter. Raksha Karma is also described which uses herbs to ensure disinfection and prevent sepsis via clothes, cot or ward room.

Examination of Baby

Kashyapa Samhita describes that pain in children should be understood by sudden and repeated crying. The part of body which the child touches often and does not allow to be touched by others (tenderness) is

to be understood as having pain. Pain in the head should be understood by the closing of eyelids; pain in chest by biting of tongue and lips, dyspnoea and clenching of the fist. Pain in abdomen is judged by constipation, vomiting, biting of breast, intestinal gurgling sound, flatulence, bending the back and elevating abdomen. Pain in urinary bladder and genitals is interpreted by obstruction to elimination of the feces and urine and frightened look.



Bala Samskaras (Childhood Sacraments)

Samskaras are rites performed with an objective of imparting positive qualities in the child.. The childhood Sanskara aim at preparing the baby for extra uterine life successfully, develop proper feeding habits, ensure adequate nutrition, prevent diseases, adapt to environment for further survival, give individual identity and educate the child

Vagbhata has also described Namakarana sanskara (Naming the baby) to be done on 10th or 12th day after birth while he opines sixth month as appropriate time for Annaprashan (complimentary feeding). Child is first made to sit by 6 months (Upvishtana sanskara).

Dentition and Related Diseases

There is no dosha which is not vitiated during eruption of teeth i.e., no part of body is without pain. Predominance of vata dosha is considered the cause for late dentition and grinding of teeth during sleep. Some common ailments during dentition includes fever, diarrhea, cough etc

Vagbhata has aptly described the properties of unvitiated breastmilk and the importance of consuming it. Balashosha, dealing with the nutritional aspect and balagrahas are also deeply emphasized in AshtangaHridaya which are the diseases affected in Balyavastha.

kumara (adolescence)

Adolescence is explained as age period where the unstable shareera dhatus gets stabilized. Proper

nourishment and suppliments administered during this time period will help in the complete growth and development. Rasayanas are the medicaments which are specifically targeted to impact the Dhatus as per Ayurveda classics. Specific Rasayanas such as Narasimha rasayana, Chyavanaprasha, Shatavari guda etc helps in overall development along with specific hormonal targets both in males and females.

Dr.James Chacko
Amrita School of Ayurveda



Hindu philosophy and scriptures have always given utmost importance to environment and its cleanliness. This becomes clear if one goes through BhoomiSukta of Atharva Veda that considers the Earth as Mother, a living force, and praises her beauty and existence. When we see God and Mother in nature, we can't resist but to keep it pristine and clean. That attitude and respect should come from within. It isn't something that someone should force upon us. Take the example of how a pooja starts in a temple. The idol is first cleaned or bathed with the purest things in the very beginning. Thus, cleaning or purifying was of the foremost priority according to our forefathers. The Yajnavalkya Smriti even discusses different methods of cleaning our environment.

"Shaucha" is considered as one of the vital elements in leading a Dharmic life. Our great epics and Hindu scriptures stress the importance of Shaucha. "Shaucha" literally means both cleanliness and purity and is one of the Niyama's in the Yoga Sutra's of Patanjali. "Shaucha" is that form to which there arises dislike i.e, dispassion towards one's body and detachment towards contact with others. Shaucha gives rise to purity of mind, contentment, one pointedness, conquest of the senses and competency to attain Atma-Darshana. Hence, Shaucha not only refers to external cleanliness, but also to the purity of speech and mind. A person who violates the tenet of Shaucha is said to be sinful as he is violating his Dharma.

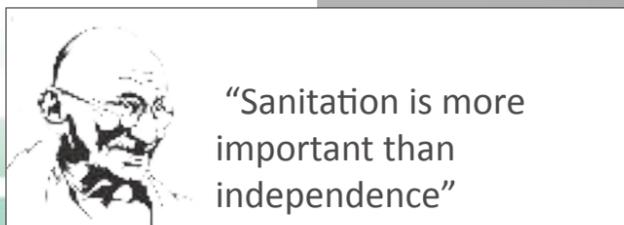
From garbage filled roads to green and clean paths, from filthy lake sides to lake view tourisms, from public fields to clean and closed toilets, from ailing wails to healthy giggles, from filthy scorns to clean smiles... This is what Swachh Bharath Abhiyaan initiated by our honourable Prime Minister, Sri. Narendra Modi aims at. This campaign was officially launched by the Prime Minister on the 145th birth anniversary of Mahatma Gandhi on 2nd October at Rajghat. This movement which was started under the banner of Gandhiji's ideals is proposed to be completed by 150th birth anniversary as Gandhi too dreamt of a clean India.

The mission has targeted at eliminating the problem of open defecation, converting insanitary toilets to pour flush toilets, eradicating manual scavenging, complete disposal and reverse of solid and liquid wastes, bringing behavioural changes in people and to motivate healthy practices, spreading cleanliness awareness, improving the cleaning and drainage systems in urban and rural

Swachh Bharath Abhiyaan

areas and a lot more. The mission has an interesting theme of inviting nine new people by each and every involved person in the campaign like the branches of a tree.

The completion of this mission would indirectly draw the attention of business investors in India, enhance the GDP growth, draw tourist attraction from all over the world, bring variety of sources of employment, reduce health costs, reduce lethal disease rate and many more.



Earlier, many awareness programmes (such as Total Sanitation Campaign, Nirmal Bharath Abhiyaan, etc) about the environmental sanitation and personal cleanliness were launched by the Govt. which were not very effective. What is unique about this mission is that it is "beyond politics" and is "inspired by patriotism" and gives credit to all citizens of India. Proper hygiene and cleanliness has the capability to change the global perception about India. We can be proud, as we belong to the Amrita family, where our chancellor Amma, long before this idea of Swachh Bharath Abhiyaan was born, came up with the idea of a clean-up drive. The campaign was a huge cleaner success beyond everyone's expectations. Amma asks that all of us take a vow to clean our surroundings. Amma believes that if the people, government and other organizations work together, this sacred endeavour will certainly bear fruit.

When we rank the countries across the world according to its cleanliness, it is a pitiful fact that India comes close to the bottom of the list. When we compare India to other countries, it is true that India lacks in cleaning infrastructures or even garbage bins. This problem can be undertaken by the Government. But we can't sit back and relax pointing our fingers

at the authorities and officials. Even in those places where we have dozens of dustbins in a mile, we walk footballing cans and covers. So, who is the culprit here? Japan, Singapore and Hong Kong figure at the top of the list when it comes to cleanliness. Yes, they do have better cleaning systems, they have high penalties, but above all, it is not the fear of being fined that stops them from littering; it is their attitude towards their surroundings that helps the citizens keep the city clean. This healthy attitude is what India is craving for. When the Government comes with a new rule, rather than abiding by it, we find 101 ways to create a loophole in it. When they put up sign boards that recognize the place as a garbage-free zone, people are keen on piling up wastes right under the board. When cameras are installed to identify those people, they put on helmets and throw the waste right there again! It would be a Herculean task to find at least one Indian who hasn't contributed even a tiny wrapper to the rising waste. So, before you blame the govt., take a look at yourselves in the mirror, there lies the real culprit and next time, before you find a loophole, try to find a dustbin.

Amritha Gireesh
S5 Int MA English

TERRACOTTA Temples of Bengal

Clay can be considered as one of the oldest building materials in the history of man after stone. It was and is being used for several purposes due to its abundance and universal supply. The discovery of baking clay provided the permanence to the clay objects. This baked clay is called as Terracotta. It indeed was a great invention since there has been several masterpiece sculptures moulded using Terracotta. All over the world, across the ages, people have transformed this heavy, dark and formless material into a lighter building material. They created their living spaces and adapted their architectural and constructive solutions according to the behavior and properties of the soil.

The use of Terracotta as a material evolved from making objects of daily needs in ancient times to its use in temples in the 15th-16th century AD in West Bengal. Until this period, stone was the main material used for building temples. This was due to unavailability of the stone and availability of good

Transformation through Time and Technology

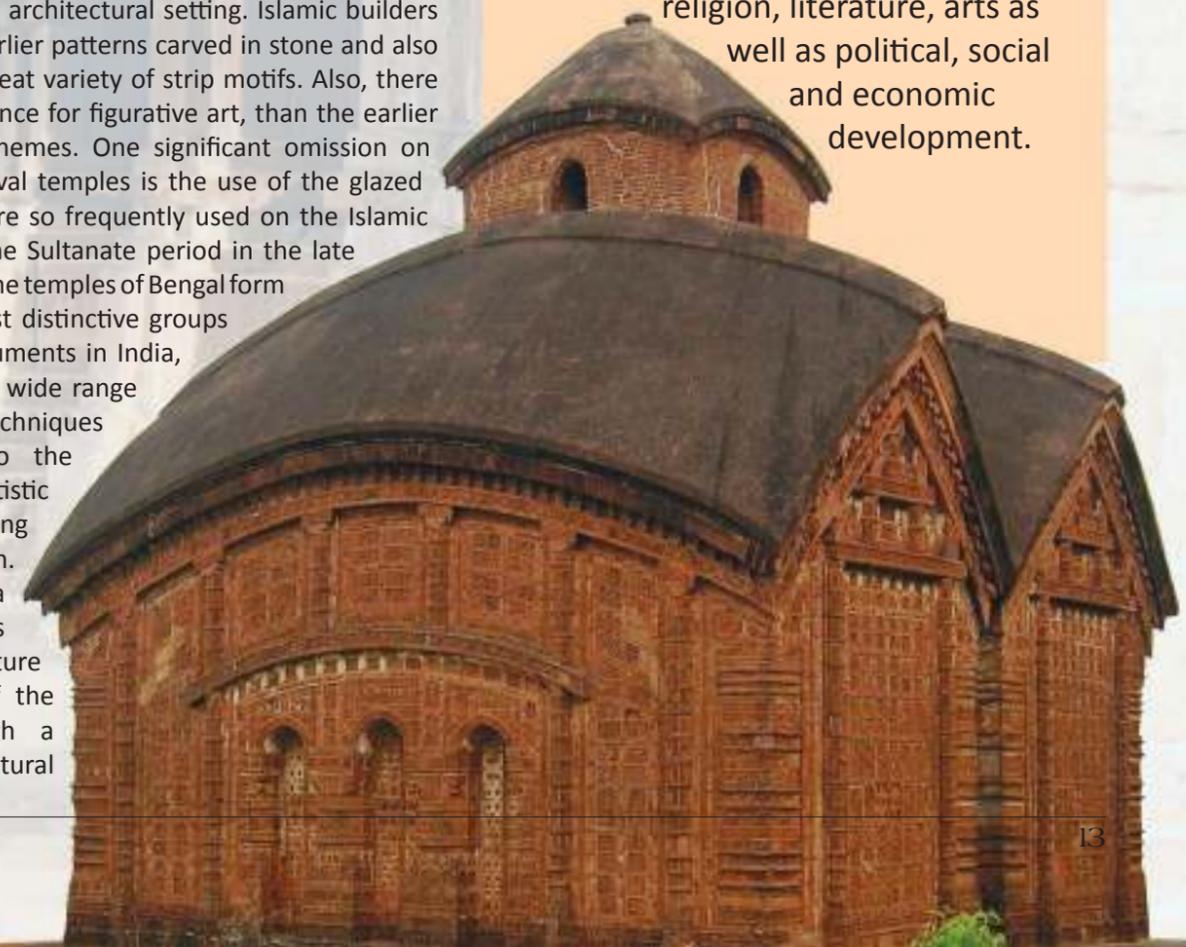
alluvial soil, and the need to create pseudo effect, e.g. in West Bengal, terracotta was used to depict stone carvings and sometimes to resemble the articulation on wooden doors. In the same period, from 15th to early 20th century, terracotta was used as a cheap and easily available substitute for marble in some parts of Europe. These temples form one of the most distinctive groups of sacred monuments in India. Due to the multiple artistic influences acting upon the region, Bengali temples show a wide range of forms and techniques. The Bengali temples nevertheless exhibit a lot of similarities in both their architecture and sculpture, characteristically expressed in brick and terracotta. Hence, Bengali temples can be viewed as an important manifestation of this region's culture, closely associated with contemporary movements in religion, literature, arts as well as political, social and economic development. These temples have elaborate representation of themes, which are borrowed from the Puranas. Hence, these temple decorations also acted as a medium to educate common people about our culture and traditions. Most of the decorations

are typically Gupta in style. Largeness of conception, the dramatic vigor, and the liveliness of the pictures depicted on bricks and plaques stand for the vividness of wall paintings and frescoes, the dearth of which is compensated by these pictures on bricks and plaques. The plaques of terracotta give us a glimpse of the early culture of the people of Bengal, which is not available in Bengal literature. This proves that this art supports the literary constitution of Bengal. The overall form and arrangement is different from the other Indian temple typologies. The popular sequence of Bhogmandapa, Natmandapa, Garbhagriha is absent here. There are limited number of architectural elements used in temple plan - square, rectangular, octagonal chambers and long rectangular corridors and porches. These spaces are vaulted or domed and are limited in size. The pillars used in these temples with triple arches were essentially based on pillars built in stone during Pala-Sena period. When used in brick temples, some changes were introduced in these pillars. Since the pillars used on the facades of these temples became main feature, and were decorated with terracotta panels of smaller sizes, the square bases and square capitals were changed to octagonal and the shaft became multifaceted. Sculptures on the temple facade of Bengal are carefully organized with respect to their architectural setting. Islamic builders imitated the earlier patterns carved in stone and also introduced a great variety of strip motifs. Also, there is more preference for figurative art, than the earlier nonfigurative themes. One significant omission on any late medieval temples is the use of the glazed tiles, which were so frequently used on the Islamic structures of the Sultanate period in the late 15th century. The temples of Bengal form one of the most distinctive groups of sacred monuments in India, incorporating a wide range of forms and techniques that testify to the multiple artistic influences acting upon the region. The terracotta here expresses a faithful picture of the lives of the people through a dynamic natural

quality of technique. From the above study we can say that terracotta as a material tried to fulfill the need of that time. It was modified, explored to its fullest during 15th - 19th century in West Bengal. Nowadays, with the help of technology terracotta is being explored as a structural material and it's no more a material only for surface embellishment. At every stage of its transformation this material tried to fulfill the need of time and the need to explore, evolving with time and technology.

Anandapadmanabhan.S
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The Bengali temples nevertheless exhibit a lot of similarities in both their architecture and sculpture, characteristically expressed in brick and terracotta. Hence, Bengali temples can be viewed as an important manifestation of this region's culture, closely associated with contemporary movements in religion, literature, arts as well as political, social and economic development.



The strength of a nation lies in its education system. India remained a pioneer in the field of education since the ancient times. The traditional system of education was aimed at grooming the youngsters to grow in to matured citizens and contribute the maximum in their fields of activities. With the introduction of the Macaulay system during the 1830s, the course of Indian education took a reverse turn.

MAKING EDUCATION NATION-CENTRIC

It is unfortunate that even after sixty seven years of Independence we follow a system that is completely alien to the ethos and functioning of this great nation. Contemporary studies reveal that the fundamentals and functioning of India are rooted in our unique social and cultural traditions. It is high time that we started making the education nation-centric, when India is fast emerging as a powerful nation at the global level.

Background

The introduction of the alien education system resulted in cutting off the umbilical connections of the young Indians with their roots. As a consequence, the youngsters began to lose touch with their own backgrounds, people and surroundings. Rabindranath Tagore noted this as early as in 1903: "Our real ties are with the Bharatavarsha that lies outside our textbooks. If the history of this tie for a substantially long period

gets lost, our soul losses its anchorage. After all, we are not weeds or parasitical plants in India. Over many hundreds of years, it is our roots, hundreds and thousands of them, that have occupied the very heart of Bharatavarsha. But we are obliged to learn a brand of history that makes our children forget this very fact. It appears as if we are nobody in India; as if those who came from outside alone matter."

The position did not change even after independence. In spite of the wise counsels of the great personalities like Swami Vivekananda, Maharishi Aurobindo, Mahatma Gandhi and Tagore, solid recommendations of different committees, suggestions of the higher courts and repeated appeals by the committed sections, concrete systems have not been put in place by the concerned authorities in this regard.

School children want drastic changes

A survey on Indian education was earlier conducted by the International Foundation for India's Heritage among school children studying between the ninth and twelfth standards. It covered more than 11,000 students spread across 21 different states of the country. It was the first study conducted among the children asking them to give their opinions. The study was later submitted to the central government during 2005.

The position, problems, difficulties and recommendations mentioned in the study are revealing. 91 per cent of children feel that they would benefit from learning the elements of Indian culture. Half of the students note that the education system is deficient in some respect. Majority of the students are not aware of the significance of even popular festivals such as Pongal and Holi. Their recommendations include reduction of the existing syllabi, less mechanical pedagogy, practical teaching, less book loads and lesser examination burden.

Higher education system has no originality

The position in the higher education system is equally alarming. The universities and colleges show little originality. They all try to imitate the western systems and implement the western approaches. As a result,

the courses, syllabi and pedagogy are all invariably patterned after the West. Almost all the institutions try to prescribe the maximum number of text books written by the foreign authors. Even the remaining ones written by the Indian academics are mere carbon copies of their counterparts sitting in the distant lands.

This is true for most of the subjects. As a result the Indian university system has been outsourcing its knowledge from the western countries. Hence we are producing graduates and scholars who lack the proper perspective about our country, backgrounds and the functioning systems. This is causing serious damage to the functioning and development of our nation.

India is emerging despite the failure of educated sections

India was a poor and underdeveloped country at the time of Independence. The different sectors of the economy were in a very bad shape. About 45 per cent of the population was living below poverty line. The literacy rate was a little more than 18 per cent. People were tired of the alien domination for around thousand years. They had lost their supremacy, wealth, honor and energy due to the oppressive control of the Europeans for about two hundred years.

But now the nation is fast emerging as a major power. It is already the third largest economy in the world. It remains the second fastest growing nation for over a decade. Indian businesses are already there in different parts of the world. All the predictions at different levels unanimously point out that India would emerge stronger in the coming years to reach higher positions at the global level.

The emergence of India over the last six decades is one of the most successful stories of the contemporary world. It has happened in spite of the confusions and contradictions at the policy making levels. The ruling classes have been consistently imitating only the western ideas and approaches after independence. It was socialism for more than three decades since the 1950s and it is the US driven capitalism from the early 1990s.

As a result, India is not able to fully realize her potentials and achieve the required results. Besides, there are serious problems that remain to be solved. The main reason for this situation is the lack of proper understanding of the nation by the educated sections.



Education is the manifestation of the perfection already in man

-Swami Vivekananda

Truth about India's economic history known due to foreign scholars

India had a vibrant and prosperous economy since the ancient times. The advancements during the periods of the Indus-Saraswathy civilization and the subsequent centuries were due to the strong fundamentals. The first book on economics namely Arthashastra, was written in India about 2300 years ago. One of the major attractions of the alien forces towards India was the high level of prosperity and achievements of the country.

It is unfortunate that no Indian academic expert or an economics professor attempted to study India's economic performance of the earlier centuries, after independence. It is the studies of a few western scholars during the past three decades that give the position and status of the Indian economy over the past two millennia. The studies by Paul Bairoch, Andre Gunder Frank and Angus Madission clearly reveal that India remained the most prosperous economy in the world for most of the period during the past two thousand years and the western countries entered the global economic map only about five hundred years ago.

The above studies have completely changed the global discourse on economics. They have established that India remained as the most powerful economy in history till the Europeans intervened with the native systems and emerged as the leading performers. But even after the publication of the above path breaking studies, which are accepted by the rest of the world, the Indian universities are not using them and most of the academics from the concerned fields are not even aware of such studies till today.

Academics refuse to study the contemporary systems

Besides, the academics refrain from studying even the contemporary functioning systems. Different indicators show that the functioning of the Indian economy, business, social and cultural systems are much better than those of the western countries. This is the reason why the nation has been emerging powerfully, in spite of the repeated failures of the policy making classes and the many difficulties surrounding the lives of people. How many of us know that India's growth rates after independence continue to remain more than those of most of the richer countries in the world?

The studies undertaken by the western experts in their countries reveal that their systems of functioning at the family, social, business and economic levels suffer from serious limitations and have been failing to a large extent. As a result they are looking for alternatives and find that many of the Indian methods are far superior. They openly admit that India has her own 'business models' and there is an 'Indian way' of functioning in the economy. As a result many of the western universities and business schools have started studying India. A few months back there was a big team of scholars from the Harvard institutions to study the Maha Kumbh Mela at Allahabad.

Field studies reveal strong fundamentals and unique systems

Field studies relating to the functioning of the economy being undertaken in different parts of the country from the Indian perspectives during the past two decades continue to reveal many new facts. They show that India has strong fundamentals, with higher rates of saving and capital formation, lots of entrepreneurial abilities and distinct functioning methods. They also show that the families and societies play a larger role in shaping the functioning of the economy, with the women playing a crucial role.

Besides the studies reveal that the basic reason for the functioning of the Indian families, society, businesses and the economy remain the traditional and cultural strengths of our nation. Further they show that the growth of nation has been due to the extraordinary efforts and native intelligence of the millions of people who are identified as the ordinary sections of the society.

India-centric studies is the need of the hour

Hence it is important that we have to understand the functioning systems of our country from the true perspectives. Without a clear knowledge about the ground realities, it is not possible to develop original ideas and frame policies. For this purpose, we require studies at different levels. They can be better undertaken only by those who understand the local backgrounds without the preconceived notions. Simultaneously the Indian concepts, knowledge systems and functioning methods have to be disseminated to the relevant sections and the student community at different levels.

The studies undertaken by the western experts in their countries reveal that their systems of functioning at the family, social, business and economic levels suffer from serious limitations and have been failing to a large extent.

India's emergence should be on her own terms and native strengths. It should be for the benefit of all sections of the society. The rest of the world expects the Indian model to show a new way for them as well. As the great visionary Swami Vivekananda noted we have to see the Bharat Mata sitting at the throne in all her

glory very soon. It is possible, as she has the required strengths and all the potential. The immediate step in this process is to make the Indian education nation-centric.

References:

1. Rabindranath Tagore in 'The History of Bharatvarsha', www.ifih.org
2. Michel Danino, 'A Survey of Indian Education', International Forum for India's Heritage, Submitted to the Govt. of India, New Delhi, 2005
3. P.Kanagasabapathi, Indian Models of Economy, Business and Management, Third Edition, PHI Learning Pvt. Ltd., New Delhi, 2012

Dr.P. Kanakasabapathy (Renowned writer)



Kondapalli toys or Kondapalli Bommalu are delightful expressions of art and of rich traditional values of our country.



Aswin Babu
S5 EEE B

Kondapalli Bommalu

Toy making in Kondapalli is an intricate process which, even to this day, is done only by hand using a special type of wood known as 'Tella Poniki' or white sand. Each organ of the body is separately carved after the wood is seasoned and cut in appropriate sizes and joined together with an adhesive paste derived from tamarind seeds. A coating of 'sudda (white lime)' is given over the surface. It is then placed on charcoal fire to allow the moisture to evaporate, leaving the toy firm and solid. A cloth is then fixed on top of the toy. The toys are then coated with a primer and distinctive colours are then applied. These toys depict beautifully fashioned single figures of deities of rural

life. The 'elephant ambari', toddy tree and 'dashavaatara' are the most popular of the Kondapalli toys. Experts believe that there is a strong influence of Islamic and Rajasthani cultures on this art form.

These are the most recent categories of handicrafts to obtain Geographical Indications (GI) protection in India, being only the second handicraft from the state of Andhra Pradesh to receive such a protection. It is in recognition of the inherently distinctive and intricate nature of the art form underlying these toys that the GI protection was granted to this art form. Made in the village of Kondapalli on National Highway 9, 25 km from Vijayawada, this art form can be traced back to the times of Sri Krishna Deva Raya.

Although the NCRB has made a valiant effort to segregate the farm suicides figures into two categories – farmer, and agricultural workers-- to show that farm suicides rate has fallen by 67 per cent, the fact remains that historically farm labourers have been counted as part of the farming category.

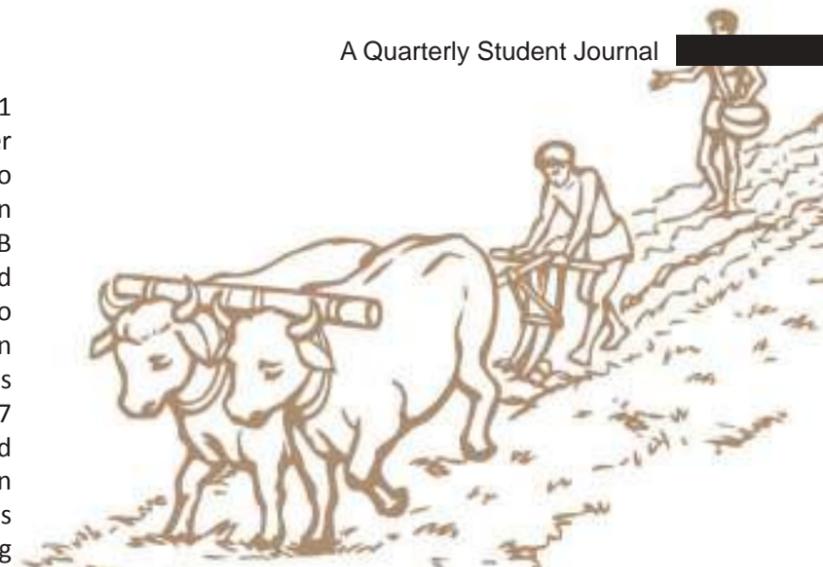
Despite all efforts to paint a rosy picture, the latest compilation of farmer suicide statistics for 2014 by the National Crime Record Bureau clearly brings out the dark underbelly of Indian agriculture. With 12,360 farmer suicides recorded in 2014, it only shows that one farmer commits suicide somewhere in the country every 42 minutes.

Although the NCRB has made a valiant effort to segregate the farm suicides figures into two categories – farmer, and agricultural workers -- to show that farm suicides rate has fallen by 67 per cent, the fact remains that historically farm labourers have been counted as part of the farming category. Adding both the figures – 5,650 farmers and 6,710 agricultural workers – the death toll in agriculture for 2014 comes to 12,360, which is higher by 5 per cent over the 2013 farm suicide figures.

The serial death dance on the farm is a grave reflection of the terrible agrarian crisis that has been continuing in farming for several decades. While every successive government – both at the centre and in the States – have made tall promises to resurrect agriculture, the swing in farm suicide figures shows the callous and deliberate neglect of a sector that employs 60-crore people. Farmers have been very conveniently used for only two political purposes – as a vote bank and as a land bank. Not showing any signs of petering off, a renewed spurt in suicides is now being witnessed in Uttar Pradesh, Karnataka, Maharashtra, Punjab and Haryana for the past few months.

In 2014, the NCRB data tells us that a third of the total suicides – 4,004 – took place in Maharashtra, followed by Telengana with 1,347 suicides. Reading between the lines, it becomes apparent that there is a visible effort to downplay the suicide figures by almost all states, including Punjab, the food bowl of the country.

Farmer's suicide



from cultivating wheat in Uttar Pradesh has been worked out at Rs 10, 758. Since wheat is a 6-month crop, sown in October and harvested in April, the per month income for a farm family comes to Rs 1,793. If this is the level of income of a wheat farmer, I wonder what kind of livelihood security we are talking about when it comes to farmers.

I looked for more details. If the other crop farmer is growing is rice, the average net return for it has been computed at Rs 4,311. Add for rice and wheat, the total that a small farmer from a hectare earns is Rs 15, 669 or Rs 1,306 per month. With such meager incomes I can understand why a large number of farmers commit suicide at regular intervals. Those who are not so courageous either sell-off their body organs or prefer to abandon farming and migrate to the cities looking for a menial job as a dehari mazdoor.

This augurs well with the findings of the socio-economic survey which states that 67-crore people in the rural areas are surviving on less than Rs 33 a day. Several other studies have shown that roughly 58 per cent farmers go to sleep hungry, and close to 62 per cent hold a MNREGA card. Instead of pushing under the carpet the grave agrarian crisis that persists, the NCRB data should actually help the government to formulate policies to reverse the suicide trends. If 1,000 suicides in the armed forces could prompt the Defence Ministry to take a series of steps to ameliorate the situation, I wonder why a human toll of close to 3 lakh farmers taking their own lives in the past 20 years has failed to shake up the successive governments?

Dr.Devinder Sharma
(Distinguished Food and trade policy analyst)

This follows a trend that Chhattisgarh started in 2011 when it started showing zero farm suicides. After record zero suicides for 2011, 4 in 2012 and again zero in 2013, Chhattisgarh now shows a sudden jump in farm suicides to 755 in 2014. In Punjab, as per NCRB data, only 22 farmers committed suicide in 2014. Add agricultural workers, and the final suicide toll comes to 64. This is a gross under-reporting of the real situation that exists. Panchayat records in just four villages of Sangrur and Mansa districts in Punjab show 607 suicides in past five years, with 29 deaths recorded between November 2014 and April 2015. Similarly, in Maharashtra, the Vidharbha Jan Andolan Samiti has contested the NCRB data. Several gaps in the counting methodology, including difficulty in putting women deaths in the farmer category since the in most cases the land is not in their names has time and again been brought out.

Indebtedness and bankruptcy (22.8 per cent) tops the reasons behind these suicides; followed by family problems (22.3 per cent) and 19 per cent because of farming related issues. Growing indebtedness of course has been considered to be the major reason behind the serial death dance being witnessed on the farm. According to a study conducted by Chandigarh-based Centre for Research in Rural and Industrial Development (CRRID) – the average farm debt has multiplied 22 times in the past decade in Punjab. From 0.25 lakh per household in 2004 it has gone upto Rs 5.6 lakh in 2014. Chhattisgarh tops the chart with an average debt of Rs 7.54 lakh, followed by Kerala with Rs 6.48 lakh household debt. The total debt that farmers carry in Punjab is almost 50 per cent higher than the State's GDP from agriculture. At the same time, another study by CRRID shows that 98 per cent of rural families in Punjab are indebted, and the average debt is 96 per cent of the total income a household receives. If this is the situation in Punjab, imagine the plight of farmers elsewhere in the country.

Why farm indebtedness has been steadily on a rise has never been studied beyond finding out how much lending is coming from the moneylenders who are known to charge exorbitant interests. While lack of institutional finance is a limitation, it is the declining agricultural income that remains the major reason for growing indebtedness. Let me illustrate with a cost analysis of a typical farmers from Uttar Pradesh. As per the latest estimates of the Commission for Agricultural Costs and Prices (CACP), the net return

Project Mausam

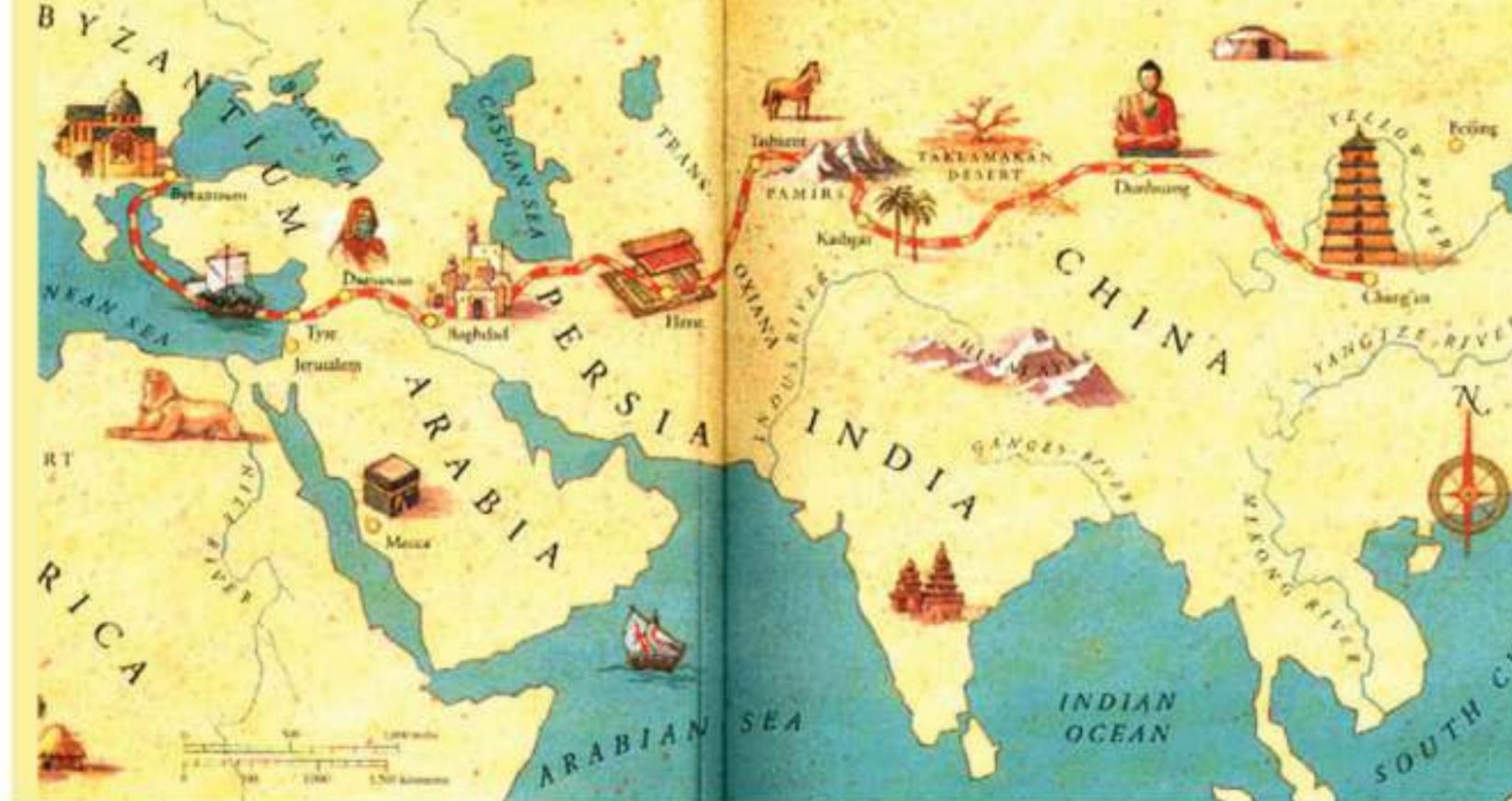
Project 'Mausam' is project with Archaeological Society of India (ASI), New Delhi as the nodal agency and Indira Gandhi National Centre for the Arts (IGNCA), New Delhi as its Research Unit. The project was proposed by Mr. Ravindra Singh, Secretary, Ministry of Culture and now has been taken up as a prelude to its nomination as a transnational inscription on the World Heritage List of UNESCO.

The purpose of the project is to determine the versatile Indian Ocean "world" — expanding from East Africa, the Arabian Peninsula, the Indian subcontinent and Sri Lanka to the Southeast Asian archipelago.

The endeavour of Project 'Mausam' is to position itself at two levels: at the macro level it aims to re-connect and re-establish communications between countries of the Indian Ocean which would lead to an enhanced understanding of cultural values and concerns; while at the micro level the focus is on understanding national cultures in their regional maritime milieu.

Objective:

The project will have two major units: (i) Project Research Unit and (ii) World Heritage Nomination Unit. The main objective of the project is transnational nomination of Maritime Cultural Routes, creation of a comprehensive database and UNESCO web platform on Maritime Cultural Landscapes and Routes and; linking other UNESCO cultural conventions with the World Heritage convention through this theme.



A Research unit is being set up at IGNCA under the Project 'Mausam'.

Goals:

Reviving lost linkages with nations

Project 'Mausam' seeks to transcend present-day national and ethnic boundaries, documenting and celebrating the common cultural values and economic ties of the Indian Ocean 'world'. Creating links to existing World Heritage sites

Providing a platform to connect discrete Cultural and Natural World Heritage sites across the Indian Ocean 'world' by providing a cross-cultural, transnational narrative.

Redefining 'Cultural Landscapes'

Identifying gaps in listing of sites and filling in lacuna by providing a holistic, multi-layered perspective and drawing relationships between the existing categories of 'Natural' and 'Cultural' Heritage.

Achieving transnational nomination under World Heritage

Advocating for 'Indian Ocean Maritime Routes' to attain transnational nomination under World Heritage, increasing scope for visibility, research, sustainable

tourism, heritage development and promoting other Cultural Conventions across the Indian Ocean region.

Linking Silk Road To Mausam Project

Linking the Silk Road initiative to India's Mausam project can create "tangible benefits" for both India and China.

China's "One Belt and One Road" initiative to revive the ancient Silk Road and Maritime Silk Roads (MSR) caused vacillation and hesitations in India over being part of the project.

Launched in June 2014, the Mausam project is an initiative aimed at re-establishing India's ancient maritime routes with its ancient trade partners in and along the Indian Ocean.

As for the "Spice Route of India", the term refers to the ancient network of sea routes that linked Asia, Europe and Africa.

The undertaking of these projects is indicative of India focusing on its maritime strategy in future, which will go hand in hand with large scale infrastructure construction.

The recent outreach of Indian Prime Minister Narendra Modi to the Indian Ocean states of Seychelles,

Mauritius and Sri Lanka is widely regarded as a move to boost India's maritime influence.

India's Initiatives

The new Indian government had spelt out the priorities of its foreign policy by inviting the Prime Minister of Mauritius along with heads of SAARC nations at the swearing in ceremony of Prime Minister Narendra Modi, which was followed by the External Affairs Minister's travel to different countries makes another step in the direction of India's 'neighbourhood first' policy.

Benefits of Association with Seychelles

India and Seychelles share historical socio-cultural ties and people to people contact due to Seychelles' strategic location connecting eastern African and south Asian sea lanes of trade and communication. This 116 island nation is located 1350 to 1800 kilometers from the East African coast, and the pluralistic society of Seychelles encompasses people of French, British, Indian, Iranian and Chinese descent. Over 10 percent of its 90,000 population is of Indian origin. India established diplomatic ties with Seychelles soon after its independence in 1976. An Indian Mission was established in 1979 in Victoria with the High Commissioner based in Dar-es-Salaam concurrently accredited to Seychelles. The bilateral relationship has been marked by high level exchanges from both sides; the last one from Indian side being by former President Pratibha Patil in 2012 and by Vice President Danny Faure of Seychelles in February 2014.

Sri.Arun

Asst. Proff Dept. of Commerce and Management



Magic Squares in India

Magic squares! Each one of us, right from our childhood, would be familiar with magic squares. It is really interesting and many of us might have thought about its origin and significance.

Magic squares have been known in India from early times. It is believed that the subject of magic squares was first taught by Lord Siva to the magician Manibhadra. It is said to have magical properties and were used in various ways by the Hindus as well as the Jains. A square having numbers filled in it in such a way that the sum of the numbers along any row, column and diagonal is a constant. MAGIC SQUARE!!!

Origin and Early History

Hindu tradition assigns the origin of magic squares and other figures to Lord Siva. Narayana(1356 AD) says that the subject of progression of which magic squares form a part, was taught by Siva to Manibhadra, the magician. The earliest unequivocal occurrence of magic squares is found in a work called Kakasupta composed by the celebrated alchemist and philosopher Nagarjuna who flourished about the 1st century AD. One of the squares in this work is named Nagarjuniya after him. The squares given by Nagarjuna are all 4*4 squares, and some of these seem to have been known before him. The easier case of 3*3 square must have also been known earlier to Nagarjuna. Another square is found in a work of Varahamihira (587 AD). A systematic study of magic squares was taken up by Narayana who, in his Ganita Kaumudi(1356 AD), gives general methods for the construction of all sorts of magic squares with the principles governing such constructions. He seems to have been the first to conceive of other figures in which numbers may be arranged so as to possess properties similar to those of magic squares. We also have Dharamanandana, a Jain scholar (circa 15th century) who contributed an 8*8 square with total 260; which came to be known as Dharmmanandana square. Another Jain scholar Sundarasuri (circa 15th century) has given a number of interesting squares which have been constructed by novel methods. These later came to be known as Sundarasuri squares.

3	n-1	6	n-8	3	n-1	6	n-8
7	n-9	4	n-2	7	n-9	4	n-2
n-6	8	n-3	1	n-6	8	n-3	1
n-4	2	n-7	9	n-4	2	n-7	9
3	n-1	6	n-8	3	n-1	6	n-8
7	n-9	4	n-2	7	n-9	4	n-2
n-6	8	n-3	1	n-6	8	n-3	1
n-4	2	n-7	9	n-4	2	n-7	9

There are some historians who claim that magic squares first originated in China. This opinion is based on the occurrence of a square called Loh Shu and is said to have come down to us from the time of the great emperor Yu(2200 BC). But to consider Loh Shu as a magic square is to force upon it an interpretation which it originally did not possess. One such arrangement is river HO and has nothing to do with Magic squares. The first unequivocal appearance of the Loh Shu in the form of a magic square is found in the writings of Tsai Yuan-Ting who lived from 1135 to 1198 AD. Magic squares also occur in the writings of Hebrew and Arab scholars while in India they were used much earlier. Thus it can be shown that the claim is wrong.

Most Prominent Magic Squares

Nagarjuna Squares

He developed 4*4 magic squares with four rows and four columns. It consisted of squares with an even sum and odd sum. He also developed a square which doesn't consist of any single digit except 6. This table had a sum of 100.

Narayana's results

As has been already pointed out the only Hindu work known to us, which gives a systematic mathematical treatment of the construction of magic squares and other figures, is the Ganita Kaumudi of Narayana. His results are numbered below :-

- 1) Magic squares are of 3 types : Having 4n cells in a row, 4n+2 cells in a row, odd number of cells in a row.
- 2) Series in arithmetical progression are used for the construction of these squares.
- 3) Magic squares can be made of as many series or groups of numbers as there are cells in a column and each series or group is composed of as many numbers as there are groups.
- 4) The common difference must be the same for each group and the initial terms of the groups are themselves in arithmetical proportion.
- 5) The numbers in a group, although belonging to an arithmetical progression, may be rearranged in various ways for the filling of the square.

Different Methods:

Knit's move, Method of superposition, Method of equi-spacing for the construction of (4n+2)*(4n+2) squares, Method of superposition for odd squares, Special method for odd squares.

He also constructed magic rectangles, circles, triangles, hexagons and various other figures such as the altar, diamond etc.

Preliminary Remarks :

Classification of magic squares into groups :-

If on dividing the number of cells in a row (bhadranka)

2	n-6	5	n
n-3	8	n-7	3
n-5	1	n-1	6
7	n-2	4	n-8

by 4 ,the remainder is zero, one, three then square is said to be Samagarbha, Visamagarbha, Visama respectively.

How can a magic square be formed?

In the construction of Magic squares, the arithmetical progression is used. In relation to that (magic square) which is required to be constructed first find the initial term and the common difference of a series in arithmetical progression, corresponding to the given sum and the number of cells. The sum divided by the bhadranka gives the phala(total). The number of grha(cells) in the square. If the number of cells (koshta) is a square number, its root is called the carana(foot or row). Such are the technical terms used by Narayana in his bhadraganita (“calculations relating

to magic figures”). The method of finding out the initial term and the common difference of an arithmetical progression, given the sum and the number of terms, follows the above preliminary remarks.

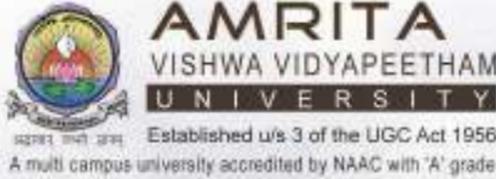
Apart from Nagarjuna and Narayana, we also have Varahamihira square (called Sarvatobhadra), Jain squares, Dharmanandana and Sundarasuri squares.

Reference

Magic squares in India-B Datta and AN Singh.

Keerthana I. K
S5 ECE

1	323	322	321	320	6	7	8	10	315	11	12	13	311	310	309	308	18
289	35	291	292	293	31	30	29	27	298	26	25	24	302	303	304	20	306
288	287	39	285	284	42	43	44	46	279	47	48	49	275	274	52	272	271
253	254	255	69	257	67	66	65	63	262	62	61	60	266	58	268	269	270
252	251	250	249	77	78	79	80	82	243	83	84	85	86	238	237	236	235
217	218	219	220	104	103	102	101	99	226	98	97	96	95	231	232	233	234
216	215	214	213	113	114	115	116	118	207	119	120	121	122	202	201	200	199
181	182	183	184	140	139	138	137	135	190	134	133	132	131	195	196	197	198
180	179	178	177	149	150	151	152	162	154	155	156	157	158	166	165	164	172
145	146	147	148	176	175	174	173	163	171	170	169	168	167	159	160	161	153
144	143	142	141	185	186	187	188	189	136	191	192	193	194	130	129	128	127
109	110	111	112	212	211	210	209	208	117	206	205	204	203	123	124	125	126
108	107	106	105	221	222	223	224	225	100	227	228	229	230	94	93	92	91
73	74	75	76	248	247	246	245	244	81	242	241	240	239	87	88	89	90
72	71	70	256	68	258	259	260	261	64	263	264	265	59	267	57	56	55
37	38	286	40	41	283	282	281	280	45	278	277	276	50	51	273	53	54
36	290	34	33	32	294	295	296	297	28	299	300	301	23	22	21	305	19
324	2	3	4	5	319	318	317	316	9	314	313	312	14	15	16	17	307






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डलवत

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“This is the ancient land, where wisdom made its home before it went into any other country... Here is the same India whose soil has been trodden by the feet of the greatest sages that ever lived... Look back, therefore, as far as you can, drink deep of the eternal fountains that are behind, and after that look forward, march forward, and make India brighter, greater, much higher, than she ever was.”

- Swami Vivekananda